

# TRACVISION<sup>®</sup>

BY KVH INDUSTRIES



## TracVision M3 Installation Guide

# TracVision® M3 Installation Guide

These instructions explain how to install the TracVision M3 satellite TV antenna system on a vessel. Complete instructions on how to use the system are provided in the *Quick Start Guide* and *Receiver User's Guide*.

## Who Should Install the System?

To ensure a safe and effective installation, KVH recommends that a KVH-authorized marine technician install the TracVision M3 system. To find a technician near you, go to [www.kvh.com/wheretogetservice](http://www.kvh.com/wheretogetservice). If you purchased the product and decide to install it yourself, please see the enclosed warranty statement for warranty implications.

## Important Safety Precaution



CAUTION

DO NOT apply power to the TracVision antenna with the radome removed because the antenna has moving parts that can cause injury.

## Receiver Activation

Once the system is fully installed, the owner needs to call KVH's Activation Department to activate the receiver for DIRECTV® service:

**Toll-free at 1-866-551-8004**

The owner will need the red Activation Card when calling to activate. In addition, the antenna will need to be turned on and locked onto the satellite. See page v of the *Receiver User's Guide* for details.

**TracVision® Activation**  
Before you can start enjoying satellite TV, the TracVision receiver must be activated.  
To activate your receiver, please follow the steps below:  
**1. Call KVH's Activation Department at:**  
**1-866-551-8004**  
(24 hours a day, 7 days a week)  
You will need to provide the KVH Activation Department representative with a credit card number and the following KVH serial numbers:  

|                                       |                                                                                              |
|---------------------------------------|----------------------------------------------------------------------------------------------|
| <small>Receiver Serial Number</small> | <small>Antenna Serial Number<br/>(if purchased as part of a complete antenna system)</small> |
| <b>R</b> 051099999                    | <b>A</b> 051077777                                                                           |

  
Installer: Please place antenna serial number in box above.  
**2. The KVH representative will provide you with 4 ID numbers necessary for activation. Enter these in the boxes below:**  

|                                     |                                   |
|-------------------------------------|-----------------------------------|
| <small>Access Card Number</small>   | <small>Receiver ID Number</small> |
| <input type="text"/>                | <input type="text"/>              |
| <small>Hughes Serial Number</small> | <small>Model Number</small>       |
| <input type="text"/>                | <input type="text"/>              |

  
Please save this card for future reference.  
You will need these numbers whenever you call DIRECTV.  
54-00004-01 Rev. D

## Technical Support

If you need technical assistance, please contact KVH Technical Support:

**Phone:** 1-401-847-3327

**E-mail:** [techs@kvh.com](mailto:techs@kvh.com)

**Internet:** [www.kvh.com/help](http://www.kvh.com/help)

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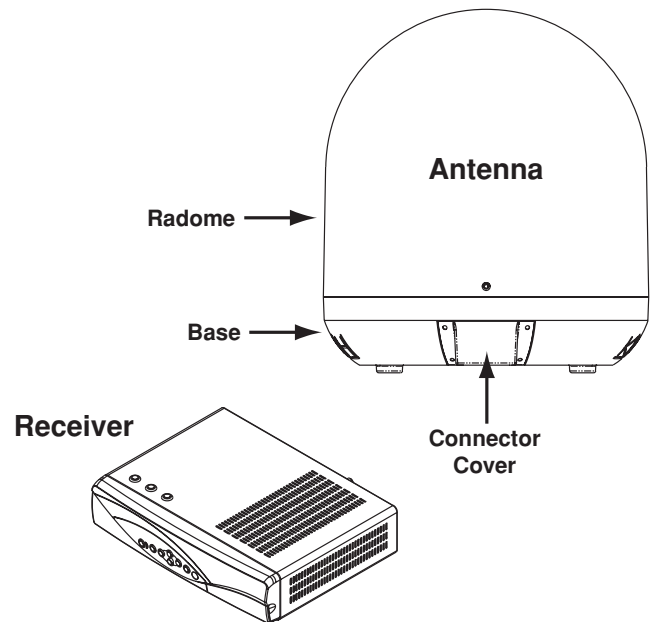
# 1

# Inspect Parts and Get Tools

1. Unpack the box and ensure it contains everything shown on the Contents List. *Save the packaging in case you need to reship the system.*
2. Carefully examine all of the supplied parts to ensure nothing was damaged in shipment.

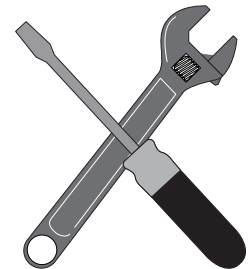


Always lift the antenna by the silver base and never by the radome or any portion of the internal antenna assembly.



3. Gather all of the tools and materials listed below. You will need these items to complete the installation.

- #2 Phillips screwdriver
- 7/16" open-end wrench
- 7/16" socket wrench
- 1/2" socket or open-end wrench
- Electric drill
- 5/16" (8 mm) drill bit
- Silicone sealant or equivalent
- Hole saw of desired diameter (for cable access hole, see page 4)
- Adhesive tape
- Light hammer
- Center punch
- Four 1/4" fasteners (optional for mounting the receiver, see page 10)



4. Peel off the extra serial number label (taped to the antenna) and affix it in the appropriate box on the red Activation Card.

**TracVision® Activation**

Before you can start enjoying satellite TV, the TracVision receiver **must be activated**.

To activate your receiver, please follow the steps below:

1. Call KVH's Activation Department at:  
**1-866-551-8004**  
(24 hours a day, 7 days a week)  
You will need to provide the KVH Activation Department representative with a credit card number and the following KVH serial numbers:

| Receiver Serial Number | Antenna Serial Number<br><small>(if purchased as part of a complete antenna system)</small> |
|------------------------|---------------------------------------------------------------------------------------------|
| R 051099999            | A <span style="border: 1px solid black; padding: 2px;"> </span>                             |

Installer: Please place antenna serial number in box above.

2. The KVH representative will provide you with 4 ID numbers necessary for activation. Enter these in the boxes below:

|                      |                    |
|----------------------|--------------------|
| Access Card Number   | Receiver ID Number |
| Hughes Serial Number | Model Number       |

Please save this card for future reference.  
You will need these numbers whenever you call DIRECTV.

54-0274-01

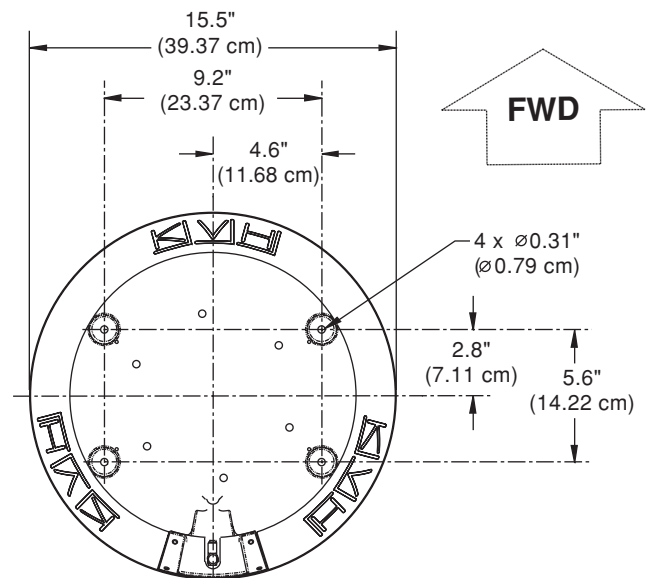
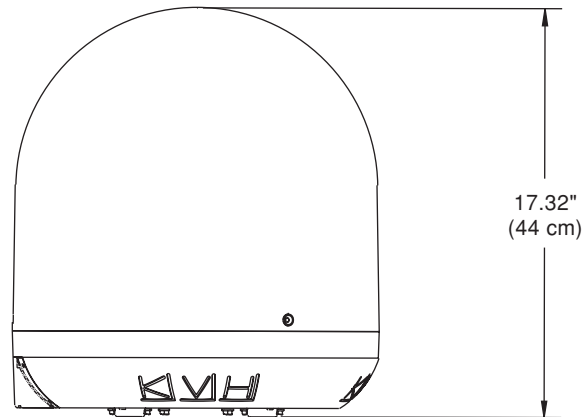
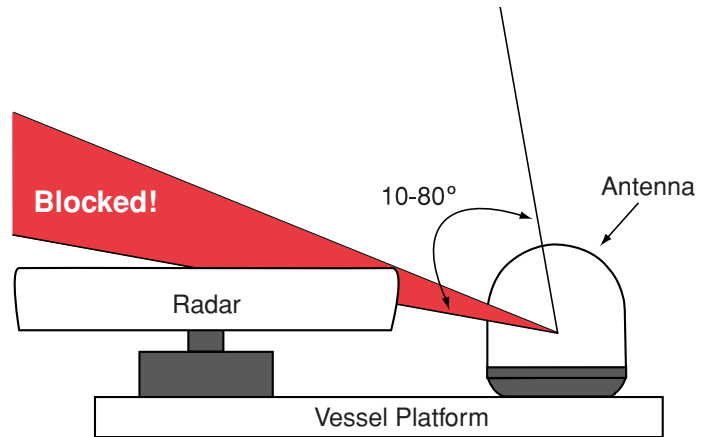
**Affix Serial Number**

# 2

## Plan the Installation

Before you begin, consider the following installation guidelines:

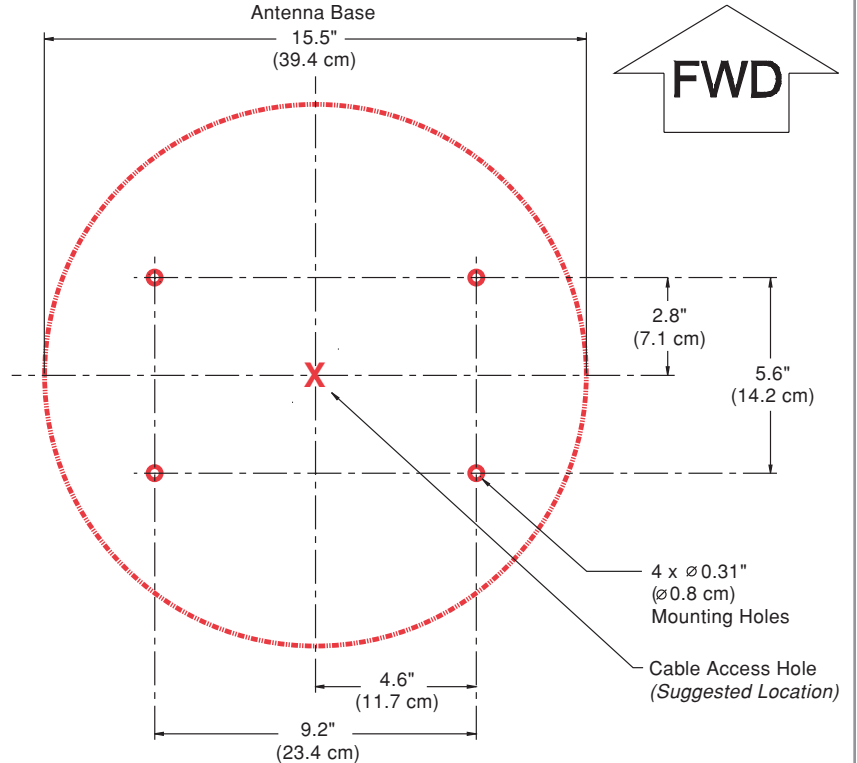
- Minimize blockage. The antenna requires a clear view of the sky to receive satellite TV. The fewer obstructions above decks, the better the system will perform.
- When choosing a mounting surface, ensure it is wide enough to accommodate the antenna's base. *See illustrations for antenna dimensions.*
- Ensure the mounting surface is flat, level (within  $\pm 2^\circ$ ), and strong enough to support the 18-pound antenna. Use a separate mounting plate, if necessary.
- Custom mounting solutions, including struts and masts, are available from several third-party manufacturers. Contact your local KVH dealer for details.
- KVH recommends that you do not mount the antenna on the same level as the radar, because the radar's energy might overload the antenna.
- Be sure to mount the antenna near enough to the supplied belowdecks receiver to allow you to connect the 50-ft. (15 m) coax cable between the antenna and the receiver, while still maintaining sufficient slack in the cable. **The antenna cable CANNOT be extended.**
- When choosing a location for the receiver, find a dry, well-ventilated area belowdecks away from any heat sources. Also be sure the receiver's front panel will be easily accessible to the user and the three lights on the top of the receiver will be visible.



# 3

## Prepare the Mounting Site

1. Unfold the supplied template and place it onto the mounting surface. Make sure the "FWD" (forward) arrow points toward the bow and is parallel to the vessel's centerline. *You do not need to mount the antenna exactly on the vessel's centerline, but the antenna's forward arrow must be parallel to it.*
2. Use the template to mark the four hole locations on the mounting surface.
3. Drill a  $\frac{5}{16}$ " (8 mm) hole at the four locations you marked in Step 2. *Later, you will insert four  $\frac{1}{4}$ "-20 bolts from above to secure the antenna to the mounting surface.*
4. Mark a location for the cable access hole, either in the center of the antenna mounting hole pattern or in an area aft of the antenna. *Later, you will route the antenna cable through this hole and into the vessel.*
5. Drill the cable access hole in the location you marked in Step 4. Be sure to size the hole appropriately to maintain a cable bend radius of at least 3" (75 mm). *If the hole location is in the center of the antenna mounting hole pattern, the diameter of the cable access hole must not exceed 3.5" (88 mm).* Smooth the edges of the hole to protect the cable.



Be sure the mounting surface is flat and level. Use a separate mounting plate, if necessary.

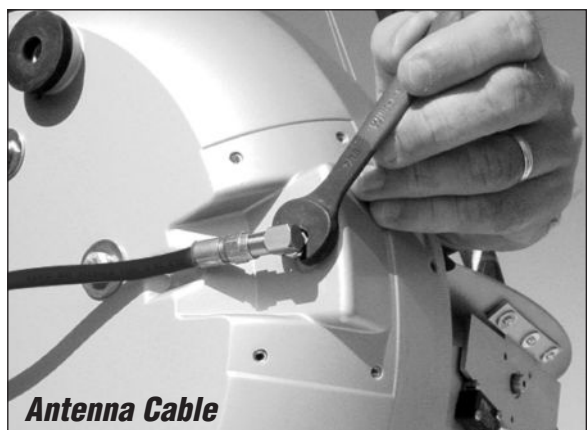
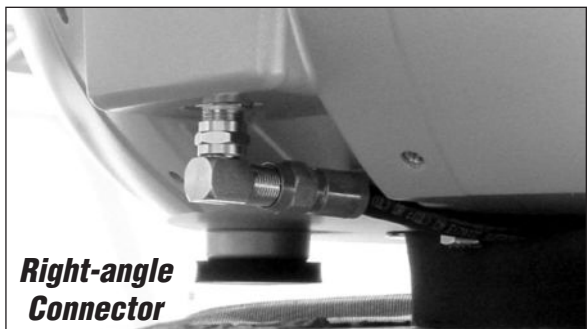
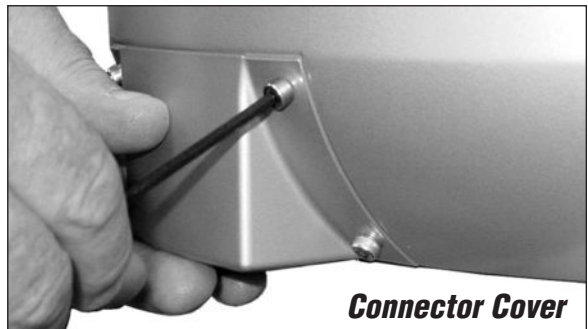
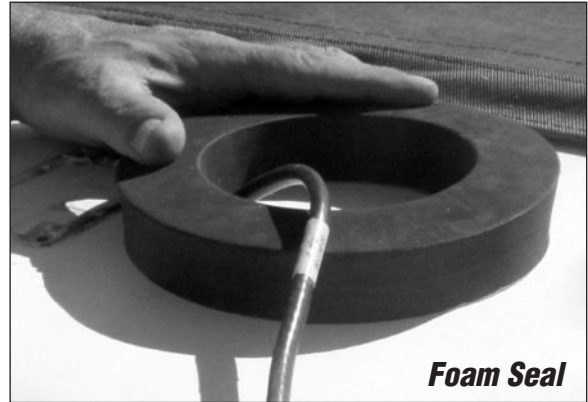


**Drilling Antenna Mounting Holes**

# 4

## Wire the Antenna

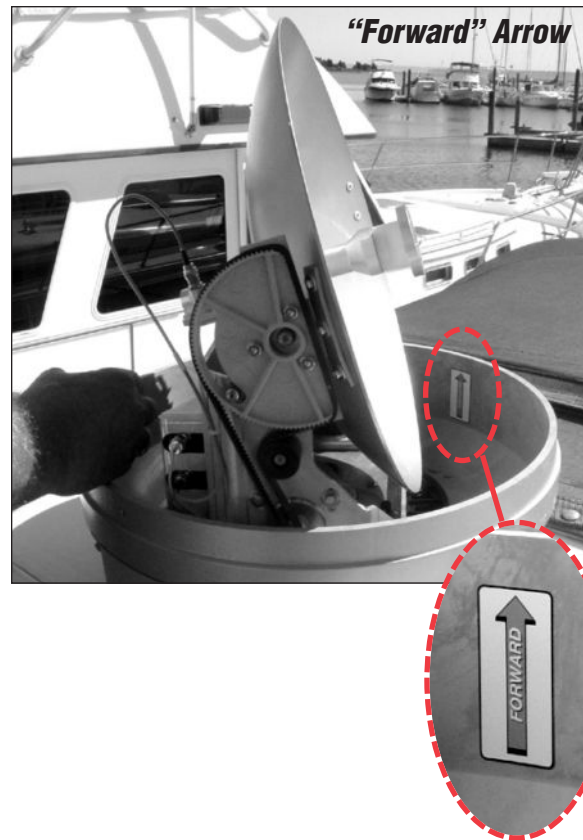
1. Clean and dry the antenna mounting surface.
2. Peel off the paper backing from the donut-shaped foam seal to expose the adhesive. Then press the foam seal down firmly onto the mounting surface, centered between the antenna mounting holes.
3. Using the supplied 3 mm Allen hex key, remove the connector cover from the antenna's base. Save the cover and the four M4 cap screws for later use.
4. Route either end of the antenna cable into the vessel. *Later, you will connect this end of the cable to the belowdecks receiver. You will connect the other end to the antenna.*
5. If you wish to route the cable beneath the antenna, attach the right-angle connector to the end of the cable. Hand-tighten, then tighten with a  $\frac{7}{16}$ " wrench for  $\frac{1}{4}$  turn to ensure an electrical and weather-proof connection
6. Connect the cable to the antenna. Hand-tighten, then tighten with a  $\frac{7}{16}$ " wrench for  $\frac{1}{4}$  turn. *Rigging tape is recommended to protect the connector.*
7. Reattach the cover over the connector. Secure in place with the M4 cap screws you removed in Step 3. The cover must be attached **before** you mount the antenna.
8. Leave an adequate service loop, approximately 8" (20 cm) of slack, in the antenna cable for easy serviceability.
9. Seal the cable access hole with silicone sealant or equivalent.



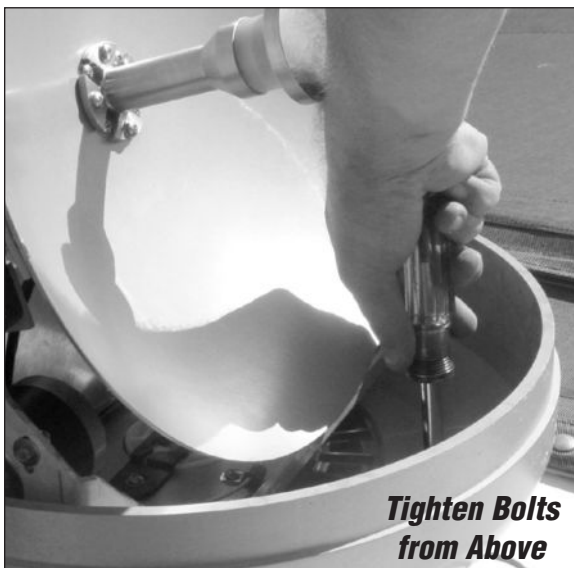
# 5

## Mount the Antenna

1. Remove the three #10-32 screws securing the radome to the antenna. Carefully remove the radome and set it aside in a safe place. *Due to the snug fit, some contact between the radome's sealing gasket and the antenna mechanism is normal.*
2. Position the antenna onto the mounting surface. The antenna's base should rest squarely atop the foam seal.
3. Align the four holes in the antenna's base with the four holes in the mounting surface. **Be sure the antenna's "Forward" arrow points toward the bow.**
4. Secure the antenna's base to the mounting surface using four 1/4"-20 bolts, 5/8" washers, 1" washers, and lock nuts, as shown in the illustration. Be sure to insert the bolts from above and use the supplied hardware for a secure installation.
5. Tighten the bolts until the foam seal is fully compressed and the antenna's four rubber feet are bottomed against the mounting surface.



Insert the mounting bolts into the antenna's base from above, not below.



**Tighten Bolts from Above**

